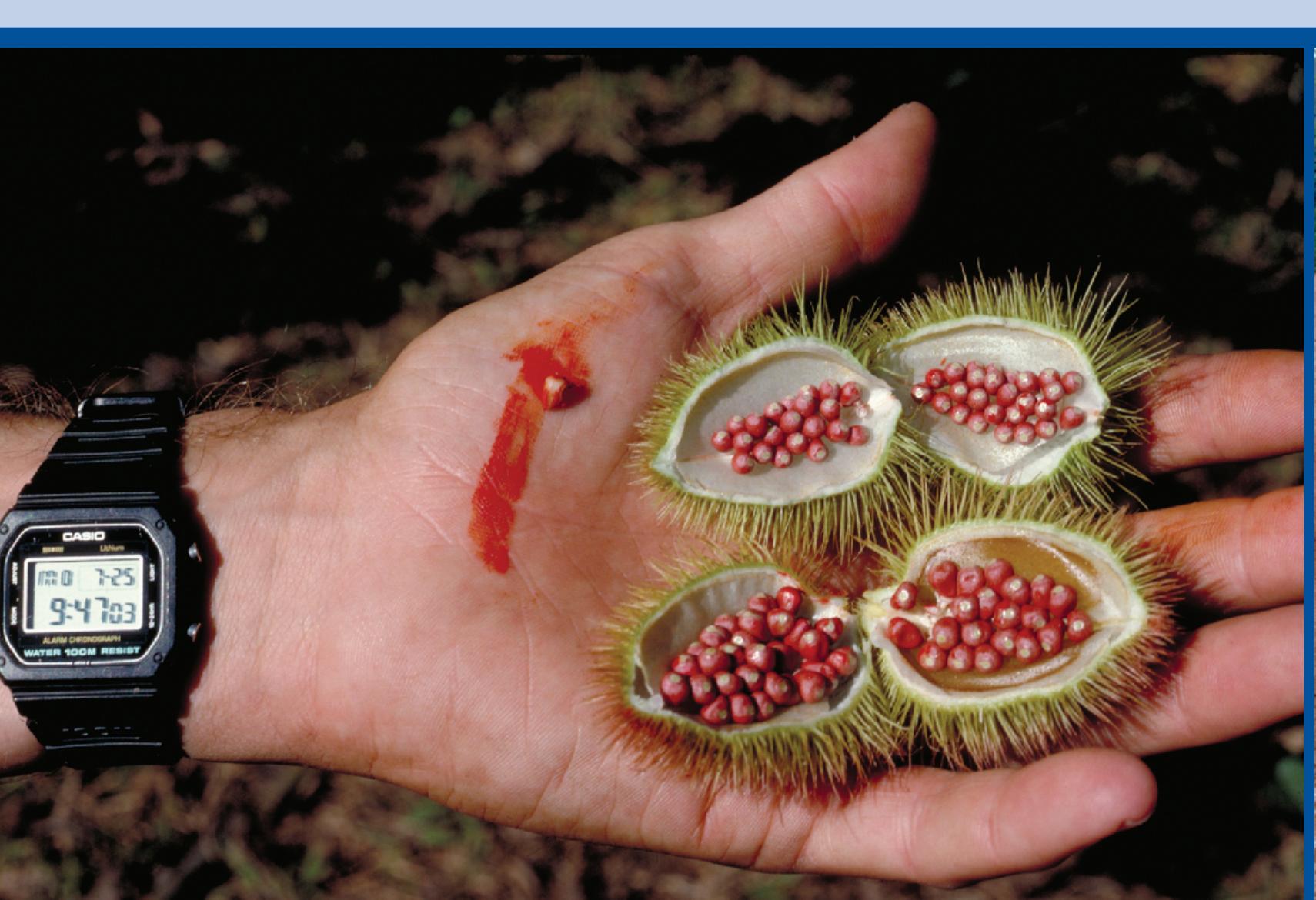
# Sustainable development is...

The defining feature of our planet is that it supports life. The variety of life forms, including the variety of genes, species and ecosystems, is known as biological diversity, or biodiversity. It provides the critical goods (food, medicines, materials…) and services (clean water, nutrient cycling…) that make economic prosperity and human survival possible. In short, it is necessary for sustainable development.

## ...partnerships

**Monitoring and Assessment of Biodiversity**

How do people know what is sustainable? Scientific information and biodiversity conservation principles must inform environmental impact assessments, research practices and long-term management and policy decisions.

In Madagascar, the Smithsonian Institution consulted with a minerals extraction company to help reduce the impact of mining on littoral forest ecosystems. In Peru and Gabon, the Smithsonian consulted with Shell Oil to promote conservation projects, resulting in decisions to limit road construction and to maintain an offshore drilling policy to minimize the impact on biodiversity. This partnership grew into the multi-stakeholder Energy and Biodiversity Initiative (EBI), a group whose members include representatives from four major energy companies and five leading conservation organizations.

EBI members meet on a regular basis to share experiences and consult with other stakeholders. Through sustained dialogue and information exchange, group members work to find cooperative solutions that integrate environmental protection into corporate best practices. By linking scientific principles to political and economic decision-making, partnerships like EBI link research to conservation policy, facilitating sustainable development.

**ICBG**

The International Cooperative Biodiversity Groups (ICBG) Program is an integrated conservation and development program which addresses the interdependent issues of biodiversity conservation, sustained economic growth and human health in terms of drug discovery for diseases of concern to both developing and developed countries. The funding for this program is provided by the National Institutes of Health, National Science Foundation and US Agency for International Development. ICBGs create institutional capacity and incentives for conservation through sustainable bioprospecting programs, drug development research and biodiversity education.

Efforts to examine the medicinal potential of the earth's plants, animals and microorganisms are immediately necessary because habitat destruction and diminishing biodiversity will make research increasingly difficult in the future. Forty to fifty percent of currently used drugs originate in naturally occurring compounds, many of which are native to currently endangered habitats. ICBG groups are working in ten countries in Latin America, Africa and Asia, building research capacity in 20 different institutions and training hundreds of individuals to catalog and study the earth's biodiversity.

Successful pharmaceutical product development can, under appropriate circumstances, promote scientific capacity development and economic incentives to conserve biodiversity. Already, ICBG researchers have collected thousands of specimens of plants, animals and fungi to examine biological activity in 19 different therapeutic areas. The project has yielded numerous publications in chemistry, biodiversity policy, conservation and ethnobiology.